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EXAMINER
YIGDALL, MICHAEL J

ART UNIT	PAPER NUMBER
2122	

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DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/804,346	CHUPA ET AL.	
	Examiner	Art Unit	
	Michael J. Yigdall	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-22 are pending and have been examined. The priority date considered for the application is 12 March 2001.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 14 is recited as "a generator dictionary comprising a plurality of generator routines...[associated] with code generator identity data," which simply describes a dictionary, a list, or a lookup table, and is considered to represent a data structure *per se*. Descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process, machine, manufacture or composition of matter. See MPEP § 2106(IV)(B)(1)(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites "prior to said retrieving" in line 3. There is insufficient antecedent basis for this limitation in the claim. Claim 18 does not recite a retrieving step. The claim was perhaps intended to depend from claim 19 rather than claim 18.

Claims 21 and 22 both recite "said generator dictionary" in line 1. There is insufficient antecedent basis for this limitation the claims. Claim 18 does not recite a generator dictionary. The claims were perhaps intended to depend from claim 19 rather than claim 18.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-10 and 14-22 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,496,833 to Goldberg et al. (hereinafter Goldberg).

With respect to claim 1, Goldberg discloses a computer system for generating source code (see the title and abstract), said computer system comprising:

(a) a generator dictionary associating a generator routine with a generator identity, said generator identity identifying a code generator (see column 12, lines 9-51, which shows a programming construct or dictionary that associates a generator routine for a specific language and database with a generator class name or identity, which identifies a code generator); and

(b) a code generation framework tool wherein said code generation framework tool, responsive to a request for an invocation of said generator routine, invokes said code generator identified by said generator identity associated with said generator routine (see column 11, lines 21-26, which shows a generator tool responding to input, i.e. to a request, and invoking the identified code generator).

With respect to claim 2, Goldberg further discloses the limitation wherein said generator dictionary comprises a plurality of generator routines, each of said generator routines associated with a generator identity (see FIG. 8 and column 12, lines 9-51, which shows a plurality of generator routines associated with a generator identity).

With respect to claim 3, Goldberg further discloses the limitation wherein said generator dictionary comprises a text file (see column 12, lines 29-51, which shows that the dictionary is in the form of source code, inherently comprising a text file).

With respect to claim 4, Goldberg further discloses the limitation wherein said generator routine comprises a logical generator name (see column 12, lines 29-51, which shows that the generator routine comprises a logical generator name such as "sybase_ctlib" or "oracle_oci").

With respect to claim 5, Goldberg further discloses the limitation wherein said code generation framework tool retrieves from said generator dictionary said generator identity responsive to said request (see column 11, lines 21-26, which shows that the generator tool selects the appropriate generator in response to the request).

With respect to claim 6, Goldberg discloses a method for generating source code from input data (see the title and abstract), said method comprising:

(a) responsive to a request for invoking a generator routine, identifying a code generator associated with said generator routine (see column 11, lines 21-26, which shows selecting the appropriate generator in response to a user request);

(b) passing said input data to said code generator identified, said code generator generating source code (see column 11, lines 7-20, which shows input data specifying the operating environment; see also column 12, lines 9-51, which shows passing the data to a generator method; see also column 11, lines 21-26, which shows generating source code).

With respect to claim 7, Goldberg further discloses the limitation wherein said identifying comprises retrieving from a generator dictionary code generator identity data associated with said generator routine (see column 12, lines 9-51, which shows a programming construct or dictionary for retrieving the identity of a code generator associated with a generator routine that represents a specific language and database).

With respect to claim 8, Goldberg further discloses the limitation wherein said identifying further comprises prior to said retrieving, locating said generator routine in said generator dictionary (see column 12, lines 29-51, which shows a "switch" construct, which inherently involves locating the appropriate "case" statement before returning the identity of a code generator).

With respect to claim 9, Goldberg further discloses the limitation wherein said generator dictionary comprises a lookup table (see column 12, lines 29-51, which shows a programming construct or dictionary that serves as a lookup table).

With respect to claim 10, Goldberg further discloses the limitation wherein said generator dictionary comprises a text file (see column 12, lines 29-51, which shows that the dictionary is in the form of source code, inherently comprising a text file).

With respect to claim 14, Goldberg discloses a generator dictionary comprising a plurality of generator routines, each of said generator routines association with code generator identity data (see FIG. 8 and column 12, lines 9-51, which shows a programming construct or dictionary comprising a plurality of generator routines for specific languages and databases associated with code generator class names or identities).

With respect to claim 15, Goldberg discloses a code generation framework tool (see the title and abstract) comprising:

(a) a receiver for receiving input data (see GUI 634 in FIG. 6 and column 10, lines 47-53, which shows an interface or receiver for receiving input data);

(b) a generator dictionary accessor for retrieving data from a generator dictionary (see column 12, lines 29-51, which shows an accessor method for retrieving data from a generator dictionary); and

(c) an invoking mechanism for calling a code generator (see code generator 604 in FIG. 6 and column 11, lines 21-26, which shows invoking a code generator); and

wherein, responsive to a receipt of input data at said receiving, said invoking mechanism calls a code generator identified by identity data retrieved by said generator dictionary accessor from a generator dictionary (see column 11, lines 21-26, which shows invoking a code generator in response to input data; see also column 12, lines 9-51, which shows that the identity of a code generator is retrieved from the accessor method).

With respect to claim 16, Goldberg further discloses a data dictionary associating a generator routine with identity data identifying a code generator (see column 12, lines 9-51, which shows a programming construct or dictionary that associates a generator routine for a specific language and database with a generator class name or identity, which identifies a code generator).

With respect to claim 17, Goldberg further discloses the limitation wherein said generator dictionary accessor identifies a generator routine within said input data received and wherein said code generator identified is determined by retrieving said identity data associated with said generator routine identified (see column 12, lines 9-51, which shows the accessor method for identifying a code generator based on a generator routine, which is determined from the input data specifying a language and database).

With respect to claim 18, see the explanation for claim 6 set forth above. It is further noted that Goldberg discloses a computer readable medium storing instructions and data (see column 20, lines 5-11).

With respect to claim 19, see the explanation for claim 7 set forth above.

With respect to claim 20, see the explanation for claim 8 set forth above.

With respect to claim 21, see the explanation for claim 9 set forth above.

With respect to claim 22, see the explanation for claim 10 set forth above.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg in view of U.S. Pat. No. 6,449,050 to Haikin.

With respect to claim 11, Goldberg discloses a method of generating source code for a first and a second deployment environment from a single input (see FIG. 8 and column 12, lines 9-51, which shows code generators for generating source code for a plurality of platforms or deployment environments), said method comprising:

(a) invoking a first code generator to generate source code for said first deployment environment from said single input, said first code generator identified by retrieving code generator identity data from a generator dictionary based on a generator routine (see column 11, lines 21-26, which shows invoking the appropriate code generator based on input information;

see also column 12, lines 9-51, which shows retrieving the identity of a code generator based on a generator routine for the deployment environment, i.e. the first deployment environment).

Although Goldberg discloses a programming construct or dictionary that associates code generators with generator routines for specific platforms or deployment environments (see column 12, lines 9-51), Goldberg does not expressly disclose:

(b) modifying said generator dictionary to associate a second code generator with said generator routine.

However, Haikin discloses modifying the pointers to routines used by a code generator, in order to generate code for different operating systems (see column 10, lines 12-15).

Goldberg further discloses:

(c) invoking said second code generator to generate source code for said second deployment environment from said single input, said second code generator identified by retrieving code generator identity data from said generator dictionary based on said generator routine (see column 11, lines 21-26, which shows invoking the appropriate code generator based on input information; see also column 12, lines 9-51, which shows retrieving the identity of a code generator based on a generator routine for the deployment environment, i.e. the second deployment environment).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the generator dictionary of Goldberg, as taught by Haikin, for the purpose of enabling code generation for a plurality of operating systems or environments.

With respect to claim 12, Goldberg further discloses the limitation wherein said invoking said first code generator comprises a call issued by one of a code generation framework tool and

a code generator; and wherein said invoking said first code generator comprises a call issued by one of said code generation framework tool and a code generator (see column 11, lines 21-26, which shows invoking or calling the appropriate code generator).

With respect to claim 13, Goldberg/Haikin further discloses the limitation wherein said modifying comprises editing said generator dictionary (see Haikin, column 10, lines 12-15, which shows modifying the pointers to routines used by a code generator, and column 9, lines 22-26, which shows that such modified information may be in a database or dictionary).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. No. 5,812,847 to Joshi et al. discloses a method for generating user interface code by selecting an API from a lookup table.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (703) 305-0352. The examiner can normally be reached on Monday through Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MY

Michael J. Yigdall
Examiner
Art Unit 2122

mjy
March 10, 2004

TUAN DAM
SUPERVISORY PATENT EXAMINER